

#### Indiana Department of Environmental Management

We make Indiana a cleaner, healthier place to live.

Joseph E. Kernan Governor

Lori F. Kaplan Commissioner

January 8, 2004

100 North Senate Avenue P.O. Box 6015 Indianapolis, Indiana 46206-6015 (317) 232-8603 (800) 451-6027 www.in.gov/idem

TO: Interested Parties / Applicant

RE: Meshberger Brothers Stone Corporation / 075-18008-00001

FROM: Paul Dubenetzky

Chief, Permits Branch Office of Air Quality

### Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, within eighteen (18) calendar days of the mailing of this notice. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- the date the document is delivered to the Office of Environmental Adjudication (OEA); (1)
- the date of the postmark on the envelope containing the document, if the document is mailed to (2) OEA by U.S. mail; or
- The date on which the document is deposited with a private carrier, as shown by receipt issued by (3)the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3)identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- the issues, with particularity, proposed for considerations at any hearing; and (5)
- identification of the terms and conditions which, in the judgment of the person making the request. (6)would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

> Enclosures FNPER.dot 9/16/03





## Indiana Department of Environmental Management

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Commissioner

100 North Senate Avenue P. O. Box 6015 Indianapolis, Indiana 46206-6015 (317) 232-8603 (800) 451-6027 www.IN.gov/idem

# NEW SOURCE CONSTRUCTION PERMIT and SOURCE SPECIFIC OPERATING AGREEMENT OFFICE OF AIR QUALITY

# Meshberger Brothers Stone Corporation 2228 West County Road 125 South Portland, Indiana 47371

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-5.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: SSOA 075-18008-00001	
Issued by: Original Signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: January 8, 2004 Expiration Date: January 8, 2009

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Annual Notification
Affidavit of Construction

Permit Reviewer: MLK/MES

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#### **SECTION A**

#### SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in Conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

#### A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary crushed stone processing plant.

Authorized Individual: Vice President of Operations

Source Address: 2228 West County Road 125 South, Portland, Indiana 47371

Mailing Address: P.O. Box 902, Portland, Indiana 47371

General Source Phone: 260-726-9297

SIC Code: 1422 County Location: Jay

Source Location Status: Attainment for all criteria pollutants
Source Status: Specific Source Operating Agreement
Minor Source, under PSD Rules;

Minor Source, Section 112 of the Clean Air Act

#### A.2 Emissions Units and Pollution Control Equipment Summary

This stationary source is approved to construct and operate the following emissions units and pollution control devices:

One (1) dual fuel-fired aggregate dryer burner, identified as Emission Unit #13, combusting natural gas and No. 2 fuel oil, exhausting to Stack #15, heat input capacity: 70 million British thermal units per hour.

#### A.3 SSOA Applicability [326 IAC 2-9-1]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2 (Applicability), is currently operating under a Specific Source Operating Agreement (SSOA) in accordance with 326 IAC 2-9-8 for a crushed stone processing plant (SSOA 075-7458-00001, issued on December 19, 1996) and has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a separate SSOA to operate one (1) dual-fired aggregate dryer burner in accordance with 326 IAC 2-9-13 for external combustion sources.

Meshberger Brothers Corporation Portland, Indiana Permit Reviewer: MLK/MES

#### **SECTION B**

#### **GENERAL CONDITIONS**

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

#### B.1 Permit No Defense [IC 13]

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

#### B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

#### B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

#### B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

#### B.5 Modification to Permit [326 IAC 2]

Notwithstanding the Section B condition entitled "Source Specific Operating Agreement Program", all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

#### B.6 Source Specific Operating Agreement Program [326 IAC 2-9]

This document shall also become a source specific operating agreement pursuant to 326 IAC 2-9-1 when, prior to start of operation of the capability to combust No. 2 fuel oil in the existing aggregate dryer burner, the following requirements are met.

- (a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section.
- (1) If the Affidavit of Construction verifies that the facilities covered in this Construction Permit were constructed as proposed in the application, then the facilities may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.
- (2) If actual construction of the emission units differs from the construction proposed in the application, the source may not begin operation until the permit has been revised pursuant to 326 IAC 2-9 and an Operation Permit Validation Letter is issued.
- (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (c) Upon receipt of the Operation Permit Validation Letter from the Chief of the Permit Admini-

stration & Development Section, the Permittee shall attach it to this document.

(d) The operating agreement will be subject to annual operating permit fees pursuant to 326 IAC 2-9-13 (External Combustion Operation).

#### B.7 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.
- (c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, IN 46206-6015

(d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

#### B.8 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each emissions unit:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

The PMP extension notification does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.
- (c) A copy of the PMP's shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMP whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

#### B.9 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

- (a) Permit revisions are governed by the requirements of 326 IAC 2-6.1-6.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1.

- (c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]
- (d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

# B.10 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)] [IC 13-14-2-2] [IC 13-20-3-1] [IC 13-17-3-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or

- monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

#### B.11 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)]:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAQ, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

#### B.12 Annual Fee Payment [326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing.
- (b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, I/M & Billing Section), to determine the appropriate permit fee.

#### **SECTION C**

#### **SOURCE OPERATION CONDITIONS**

#### **Entire Source**

#### C.1 Source Status [326 IAC 2-9]

- (a) The requirements of SSOA 075-7459-00001, issued on December 19, 1996, shall remain applicable.
- (b) Pursuant to 326 IAC 2-9-1(g), the source may apply for up to four (4) different SSOAs contained in 326 IAC 2-9. The potential to emit PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>X</sub>, VOC, and CO from the entire source shall remain less than one hundred (100) tons per year.

#### C.2 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

#### C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### C.4 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

#### C.5 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or

Meshberger Brothers Corporation Portland, Indiana Permit Reviewer: MLK/MES

more of particulate matter or sulfur dioxide is emitted by using good engineering practices (GEP) pursuant to 326 IAC 1-7-3.

#### C.6 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
  - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
  - (2) If there is a change in the following:
    - (A) Asbestos removal or demolition start date;
    - (B) Removal or demolition contractor; or
    - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management Asbestos Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an "authorized individual" as defined by 326 IAC 2-7-1(34).

- (e) Procedures for Asbestos Emission Control
  The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-104 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable
  for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3)
  square feet on any other facility components or a total of at least 0.75 cubic feet on all facility
  components.
- (f) Demolition and renovation

  The Permittee shall thoroughly inspect the affected facility or part of the facility where the

demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Accredited Asbestos Inspector

The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

#### **Testing Requirements**

#### C.7 Performance Testing [326 IAC 3-6]

(a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date.

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14 days) prior to the actual date.
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ, not later than forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

#### Compliance Requirements [326 IAC 2-1.1-11]

#### C.8 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U.S. EPA.

#### **Compliance Monitoring Requirements**

#### C.9 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60, Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

#### **Record Keeping and Reporting Requirements**

#### C.10 Malfunctions Report [326 IAC 1-6-2]

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

#### C.11 General Record Keeping Requirements [326 IAC 2-6.1-5]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record Keeping requirements not already legally required shall be implemented when operation begins.

#### C.12 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) Reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) Unless otherwise specified in this permit, any report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) The first report shall cover the period commencing on the date of issuance of this permit and

ending on the last day of the reporting period. Reporting periods are based on calendar years.

#### **SECTION D.1**

#### **FACILITY OPERATION CONDITIONS**

#### Facility Description: Aggregate Dryer Burner

One (1) dual fuel-fired aggregate dryer burner, identified as Emission Unit #13, combusting natural gas and No. 2 fuel oil, exhausting to Stack #15, heat input capacity: 70 million British thermal units per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

#### **Emission Limitations and Standards**

#### D.1.1 Fuel Usage Limitations [326 IAC 2-9-13(b)(2)(A)]

Pursuant to 326 IAC 326 IAC 2-9-13(b)(2)(A), the source shall comply with the following limitations:

- (a) The aggregate dryer burner natural gas usage shall not exceed 59 million cubic feet per twelve (12) consecutive month period with compliance determined at the end of each month.
- (b) The aggregate dryer burner No. 2 fuel oil usage shall not exceed 1,407,000 gallons per twelve (12) consecutive month period with compliance determined at the end of each month.

#### D.1.2 Opacity [326 IAC 2-9-13(b)(1)]

Pursuant to 326 IAC 2-9-13(b)(1), visible emissions from the aggregate dryer burner, identified as Emission Unit #13, shall not exceed twenty percent (20%) opacity in twenty-four (24) consecutive readings in a six (6) minute period. The opacity shall be determined using 40 CFR 60 Appendix A.

#### D.1.3 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-1.1-1] [326 IAC 7-2-1]

Pursuant to 326 IAC 7-1.1 ( $SO_2$  Emissions Limitations), when combusting No. 2 fuel oil, the  $SO_2$  emissions from the 70 million British thermal units per hour aggregate dryer burner shall not exceed five tenths (0.5) pound per million British thermal units heat input. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a calendar month or annual average.

#### **Compliance Determination Requirements**

#### D.1.4 Fuel Usage [326 IAC 2-9-13(c)]

Compliance with Condition D.1.1 shall be demonstrated no later than thirty (30) days after receipt of a written request by IDEM, OAQ or USEPA.

#### D.1.5 Sulfur Dioxide Emissions and Sulfur Content

When combusting No. 2 fuel oil, compliance shall be determined utilizing one of the following options.

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths (0.5) pounds per million British thermal units heat input by:
  - (1) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification, or:
  - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.

- (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
- (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the 70 million British thermal units per hour aggregate dryer burner, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to any of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

#### Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

There are no specific Compliance Monitoring Requirements applicable to this emission unit.

#### Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

#### D.1.6 Record Keeping Requirements

- (a) To document compliance with Condition D.1.3, the Permittee shall maintain records in accordance with (1) through (5) below.
  - (1) Calendar dates covered in the compliance determination period;
  - (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions:

If the fuel supplier certification is used to demonstrate compliance, when burning alternate fuels and not determining compliance pursuant to 326 IAC 3-7-4, the following, as a minimum, shall be maintained:

- (3) Fuel supplier certifications;
- (4) The name of the fuel supplier; and
- (5) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.1.7 Annual Notice [326 IAC 2-9-1(d)]

The source shall provide an annual to notice to the commissioner stating the source is in operation and certifying that its operations are in compliance with this Source Specific Operating Agreement.

This report shall be submitted to:

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Indiana Department of Environmental Management Compliance Branch Office of Air Quality 100 North Senate Avenue P.O. Box 6015 Indianapolis, IN 46206-6015

no later than January 30 of each year, with the annual notice being submitted in the format attached.

#### D.1.8 Reporting Requirements [326 IAC 2-9-1(h)]

Any exceedance of any requirement contained in this operating agreement shall be reported, in writing, within one (1) week of its occurrence. The exceedance report shall include information on the actions taken to correct the exceedance, including measures to reduce emissions, in order to comply with the established limits. If an exceedance is the result of a malfunction, then the provisions of 326 IAC 1-6 apply.

# **Source Specific Operating Agreement**

This form should be used to comply with the notification requirements under 326 IAC 2-9.

Company Name:	Meshberger Brothers Stone Corporation
Address:	2228 West County Road 125 South
City:	Portland, Indiana
Contact Person:	Constance F. Ronald
Phone #:	260-726-7642
SSOA #:	S 075-18008-00001

I hereby certify that Meshberger Brothers Stone Corporation is still in operation and is in compliance with the requirements of Source Specific Operating Agreement (SSOA) S 075-18008-00001.

Name (typed):	
Title:	
Signature:	
Date:	

Mail to: Permit Administration & Development Section
Office of Air Quality
100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015

Meshberger Brothers Stone Corporation P.O. Box 902 Portland, IN 47371

#### **Affidavit of Construction**

,			, being duly sworn upon my oath, depose and say:
	(Name o	of the Authorized Representative	e)
	1.	I livein years of age, I am competent	County, Indiana and being of sound mind and over twenty-one (21) to give this affidavit.
	2.	I hold the position of	for Meshberger Brothers Stone Corporation (Company Name)
	3.	By virtue of my position with	, I have personal knowledge of the (Company Name)
		representations contained in t	this affidavit and am authorized to make these representations on behalf of
		(Company Name)	·
	4.	Portland Indiana 47371, compl	ger Brothers Stone Corporation, located at 2228 West County Road 125 South, leted construction of the capability to combust No. 2 fuel oil in the existing aggregate in conformity with the requirements and intent of the Construction Permit
		application received by the O	ffice of Air Quality on September 22, 2003 and as permitted pursuant to <b>No. S 075-</b>
		18008, Plant ID No. 075-1800	<b>08</b> issued on
	5.		rger Brothers Stone Corporation has submitted their source specific operating aggregate dryer burner on September 22, 2003.
<sup>-</sup> urther A	5. Affiant sa	agreement application for the	
	Affiant sai	agreement application for the	
	Affiant sai	agreement application for the	aggregate dryer burner on September 22, 2003.
	Affiant sai	agreement application for the	aggregate dryer burner on September 22, 2003.  Intations contained in this affidavit are true, to the best of my information and belief.  Signature
affirm un	Affiant sai	agreement application for the id not.	aggregate dryer burner on September 22, 2003.  Intations contained in this affidavit are true, to the best of my information and belief.
affirm un	Affiant sai	agreement application for the id not.	aggregate dryer burner on September 22, 2003.  Intations contained in this affidavit are true, to the best of my information and belief.  Signature
affirm un	Affiant sai	agreement application for the id not.  alties of perjury that the represen	aggregate dryer burner on September 22, 2003.  Intations contained in this affidavit are true, to the best of my information and belief.  Signature  Date
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Signature		

# Indiana Department of Environmental Management Office of Air Quality

## Technical Support Document (TSD) for a New Source Construction Permit and Source Specific Operating Agreement

#### **Source Background and Description**

Source Name: Meshberger Brothers Stone Corporation

Source Location: 2228 West County Road 125 South, Portland, Indiana 47371

County: Jay SIC Code: 1442

Operation Permit No.: S 075-18008-00001 Permit Reviewer: Mark L. Kramer

The Office of Air Quality (OAQ) has reviewed an application from Meshberger Brothers Stone Operation relating to the construction and operation of the capability to combust No. 2 fuel oil in an existing natural gas-fired aggregate dryer burner as follows:

One (1) dual fuel-fired aggregate dryer burner, identified as Emission Unit #13, combusting natural gas and No. 2 fuel oil, exhausting to Stack #15, heat input capacity: 70 million British thermal units per hour.

This permit contains provisions intended to satisfy the requirements of the construction permit rules.

#### **Permitted Emission Units and Pollution Control Equipment**

The source is currently operating under SSOA 075-7458-00001, issued on December 19, 1996, which does not cover the operation of the existing natural gas-fired aggregate dryer burner.

#### **Unpermitted Emission Units and Pollution Control Equipment**

There are no unpermitted facilities operating at this source during this review process.

#### **Existing Approvals**

The source has been operating under the following previous approvals including:

- (a) SSOA 075-7458-00001, issued on December 19, 1996; and
- (b) OP 38-08-92-0106, issued on November 6, 1989.

All requirements of SSOA 075-7458-00001, issued on December 19, 1996, shall remain applicable.

#### **Stack Summary**

Stack ID	Operation	Height	Diameter	Flow Rate	Temperature
		(feet)	(feet)	(acfm)	(EF)

Permit Reviewer: MLK/MES

Stack #15	Aggregate Dryer Burner	35.0	3.0 x 4.0	40,000	260
	(Emission Unit #13)				

#### **Enforcement Issue**

There are no enforcement actions pending.

Since the SSOA 075-7458-00001 was issued on December 19, 1996, the existing natural gas-fired aggregate dryer burner, identified Emission Unit #13, did not require an operating permit pursuant to 326 IAC 2-9-13(c). The existing natural gas-fired aggregate dryer burner was permitted to operate on natural gas by OP 38-08-92-0106, issued on November 6, 1989.

#### Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on September 22, 2003, with additional information received on October 27, 2003.

#### **Emission Calculations**

See Pages 1 through 4 of 4 of Appendix A of this document for detailed emissions calculations.

#### **Potential To Emit**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	4.38
PM <sub>10</sub>	4.38
SO <sub>2</sub>	155
VOC	1.69
СО	25.8
NO <sub>X</sub>	43.8

Portland, Indiana Permit Reviewer: MLK/MES

HAPs	Potential To Emit (tons/year)
Benzene	0.0006
Dichlorobenzene	0.0004
Formaldehyde	0.023
Hexane	0.552
Toluene	0.001
Lead Compounds	0.003
Cadmium Compounds	0.0009
Chromium Compounds	0.0009
Manganese Compounds	0.0018
Nickel Compounds	0.0009
Arsenic Compounds	0.0012
Beryllium Compounds	0.0009
Selenium Compounds	0.005
TOTAL	0.592

- The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of SO<sub>2</sub> is equal to or greater than one (a) hundred (100) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) **Fugitive Emissions** Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

#### **Limited Potential to Emit**

The table below summarizes the total potential to emit, reflecting all limits, of the emission units.

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM <sub>10</sub>	SO <sub>2</sub>	VOC	СО	NO <sub>x</sub>	HAPs
Aggregate Dryer Burner When Combusting Both No. 2 Fuel Oil and Natural Gas	1.47	1.63	50.0	0.412	6.00	17.0	Single Less Than 10 Total Less Than 25
PSD Threshold Level	250	250	250	250	250	250	

Meshberger Brothers Stone Corporation Portland, Indiana Permit Reviewer: MLK/MES Page 4 of 7 S 075-18008-00001 Permit Reviewer: MLK/MES

Pursuant to 326 IAC 2-9-13, Option 1, the source has elected to limit the aggregate dry burner which is proposed to be a dual fuel burner, using the option for dual fuel combustion with a maximum capacity of 10 to 100 million British thermal units per hour, combusting Nos. 1 or 2 fuel oil, and natural gas. As a result, the natural gas throughput from the aggregate dryer burner will not exceed 59 million cubic feet per twelve (12) consecutive month period with compliance determined at the end of each month and the No. 2 fuel oil throughput will not exceed 1,407,000 gallons per twelve (12) consecutive month period with compliance determined at the end of each month. These throughput limits combined are equivalent to the limited emissions in the preceding table.

This modification to an existing minor stationary source is not major because the limited potential to emit is less than the PSD threshold levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

#### **County Attainment Status**

The source is located in Jay County.

Pollutant	Status
PM <sub>10</sub>	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	attainment
СО	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Jay County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) Jay County has been classified as attainment or unclassifiable for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

#### **Source Status**

Existing Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	Less Than 100
PM <sub>10</sub>	Less Than 100
SO <sub>2</sub>	Less Than 100

Permit Reviewer: MLK/MES

Pollutant	Emissions (ton/yr)
VOC	Less Than 100
CO	Less Than 100
NO <sub>X</sub>	Less Than 100

- (a) This existing source is **not** a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.
- (b) These emissions were based on SSOA 075-7458-00001, issued on December 19, 1996, for which PM and  $PM_{10}$  emissions from the entire source were limited to less than one hundred (100) tons per year.

#### Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

As a result of the proposed addition of the capability to combust No. 2 fuel oil in the aggregate dryer burner, identified as Emission Unit #13, the source is subject to the Part 70 Permit requirements because the potential to emit (PTE) of SO<sub>2</sub> from the aggregate dryer burner is greater than one hundred (100) tons per year pursuant to 326 IAC 2-9-1(b) until the source is issued an operating agreement.

The source concurrently applied on September 22, 2003 for a Source Specific Operating Agreement (SSOA) under Option 1 of 326 IAC 2-9-13 (External combustion sources).

The source, otherwise required to obtain a Title V permit, has agreed to accept a permit with federally enforceable limits that restrict its PTE to below Part 70 thresholds. Therefore, this source will be issued a SSOA pursuant to 326 IAC 2-9-13 for the aggregate dryer burner.

#### **Federal Rule Applicability**

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to the aggregate dryer burner, identified as Emission Unit #13.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14, 326 IAC 20, 40 CFR 61 and 40 CFR Part 63) applicable to the aggregate dryer burner, identified as Emission Unit #13.

#### State Rule Applicability - Individual Facilities

326 IAC 2-9-13 (External Combustion Sources)

Since the source has chosen to comply with 326 IAC 2-9-13, Option 1 for the aggregate dryer burner, identified as Emission Unit #13, the source was not required to submit a SSOA application, but is required to comply with the requirements of 326 IAC 2-9-13(b) and (c). However, in order to render the requirements of 326 IAC 2-7 not applicable due to the proposed addition of the capability to combust No. 2 fuel oil, the source has chosen to be issued a SSOA for the aggregate dryer burner pursuant to 326 IAC 2-9-1(b) under 326 IAC 2-9-13. The following requirements will apply:

Meshberger Brothers Stone Corporation

Portland, Indiana

Permit Reviewer: MLK/MES

Page 7 of 7 S 075-18008-00001

- (a) Pursuant to 326 IAC 2-9-13(b)(1), visible emissions from the aggregate dryer burner, identified as Emission Unit #13, shall not exceed twenty percent (20%) opacity in twenty-four (24) consecutive readings in a six (6) minute period. The opacity shall be determined using 40 CFR 60 Appendix A.
- (b) Pursuant to 326 IAC 2-9-13(b)(2)(A), the source will limit the aggregate dryer burner, identified as Emission Unit #13, from Table 1 of 326 IAC 2-9-13(f) as follows:
  - (1) The aggregate dryer burner natural gas usage will not exceed 59 million cubic feet per twelve (12) consecutive month period with compliance determined at the end of each month.
  - (2) The aggregate dryer burner No. 2 fuel oil usage will not exceed 1,407,000 gallons per twelve (12) consecutive month period with compliance determined at the end of each month.
- (c) Pursuant to 326 IAC 2-9-13(c), sources that elect to comply with 326 IAC 2-9-13(b)(2)(a) must be able to demonstrate compliance no later than thirty (30) days after receipt of a written request by IDEM, OAQ or USEPA. No other compliance demonstration is required.

326 IAC 7-1.1-2 (Sulfur Dioxide Emission Limitations)

The aggregate dryer, will combust No. 2 fuel oil and is subject to the requirements of 326 IAC 7-1.1, since the limited potential to emit SO<sub>2</sub> is greater than twenty-five (25) tons per year. Pursuant to this rule, when combusting No. 2 fuel oil, sulfur dioxide emissions from 70 million British thermal unit per hours aggregate dyer burner shall not exceed 0.5 pounds per million British thermal units heat input.

326 IAC 7-2-1 (Sulfur Dioxide Compliance: reporting and methods to determine compliance)

Reports of calendar month or annual average sulfur content, heat content, fuel consumption, and sulfur dioxide emission rate shall be provided upon request to the Office of Air Quality.

#### Conclusion

The dual fuel fired aggregate dryer burner shall be subject to the conditions of the attached proposed New Source Construction Permit and Specific Source Operating Agreement (S 075-18008-00001).

# Appendix A: Emissions Calculations Natural Gas Combustion Only MM BTU/HR <100

Company Name: Meshberger Brothers Stone Corporation

Address City IN Zip: 2228 West County Road 125 South, Portland, Indiana 47371

Construction Permit: S 075-18008 Plt ID: 075-00001

Reviewer: Mark L. Kramer
Application Date: September 22, 2003

Heat Input Capacity
MMBtu/hr
MMCF/yr
MMCF/yr
MMCF/yr
MMCF/yr
MMCF/yr
MMCF/yr
Aggregate Dryer Burner (Emission Unit 13)
rated at 70 MMBtu/hr

70.00
59

	Pollutant					
Emission Factor in lb/MMCF	PM* 1.90	PM10* 7.60	SO2 0.600	NOx 100 **see below	VOC 5.50	CO 84.0
Potential Emission in tons/yr	0.583	2.33	0.184	30.7	1.69	25.8
Limited Emission in tons/yr	0.056	0.224	0.018	2.95	0.162	2.48

<sup>\*</sup>PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

#### Methodology

All emission factors are based on normal firing.

MMBtu = 1.000.000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Limited Throughput is based on Option 1 of 326 IAC 2-9-13 (External Combustion Operation for Dual fuel fired combustion units, with maximum capacities of 10 to 100 MMBtus/hr, using natural gas and Fuel Oil #s 1 or 2,

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton See page 2 for HAPs emissions calculations.

<sup>\*\*</sup>Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

#### Appendix A: Emissions Calculations Natural Gas Combustion Only MM BTU/HR <100 HAPs Emissions

Company Name: Meshberger Brothers Stone Corporation

Address City IN Zip: 2228 West County Road 125 South, Portland, Indiana 47371

Construction Permit: \$ 075-18008 Plt ID: 075-00001

Reviewer: Mark L. Kramer
Application Date: September 22, 2003

	HAPs - Organics							
Emission Factor in lb/MMcf	Benzene 0.002	Dichlorobenze 0.001	Formaldehyde 0.075	Hexane 1.80	Toluene 0.003			
Potential Emission in tons/yr	0.0006	0.0004	0.023	0.552	0.0010			
Limited Emission in tons/yr	0.0001	0.00004	0.002	0.053	0.0001			

	HAPs - Metals					
Emission Factor in lb/MMcf	Lead 0.001	Cadmium 0.001	Chromium 0.001	Manganese 0.0004	Nickel 0.002	Total
Potential Emission in tons/yr Limited Emission in tons/yr	0.0002 0.00001	0.0003 0.00003	0.0004 0.00004	0.00012 0.00001	0.0006 0.0001	0.579 0.056
Limited Emission in tons/yr	0.00001	0.00003	0.00004	0.00001	0.0001	0.05

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4.

#### Appendix A: Emissions Calculations Fuel Oil Combustion (< 100 mmBtu/hr) #1 and #2 Fuel Oil

Company Name: Meshberger Brothers Stone Corporation

Address, City IN Zip: 2228 West County Road 125 South, Portland, Indiana 47371

Construction Permit: \$ 075-18008 Plt ID: 075-00001

Reviewer: Mark L. Kramer
Application Date: September 22, 2003

Aggregate Dryer Burner (Emission Unit 13) rated at 70 MMBtu/hr

Heat Input Capacity Potential Throughput Limited Throughput S = Weight % Sulfur MMBtu/hr kgals/year kgals/year 0.500

	Pollutant					
	PM*	SO2	NOx	VOC	CO	
Emission Factor in lb/kga	2.00	71.0	20.0	0.340	5.00	
		(142.0S)				
Potential Emission in tons/yr	4.38	155	43.8	0.745	11.0	
Limited Emission in tons/yr	1.41	49.9	14.1	0.239	3.52	

#### Methodology

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Bt

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu

Limited Throughput is based on Option 1 of 326 IAC 2-9-13 (External Combustion Operation for Dual fuel fired combustion units, with maximum capacities of 10 to 100 MMBtus/hr, using natural gas and Fuel Oil #s 1or 2,

\*PM emission factor is filterable PM only. Condensable PM emission factor is 1.3 lb/kgal.

Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

See page 2 for HAPs emission calculations.

#### Appendix A: Emissions Calculations Fuel Oil Combustion (< 100 mmBtu/hr) #1 and #2 Fuel Oil HAPs Emissions

Company Name: Meshberger Brothers Stone Corporation

Address, City IN Zip: 2228 West County Road 125 South, Portland, Indiana 47371

Construction Permit: S 075-18008
Plt ID: 075-00001

Reviewer: Mark L. Kramer
Application Date: September 22, 2003

	HAPs - Metals					
Emission Factor in lb/mmBtu	Arsenic 0.000004	Beryllium 0.000003	Cadmium 0.000003	Chromium 0.000003	Lead 0.000009	
Potential Emission in tons/yr	0.0012	0.0009	0.0009	0.0009	0.003	
Limited Emission in tons/yr	0.00039	0.00030	0.00030	0.00030	0.00089	

Emission Factor in lb/mmBtu	Mercury 0.000003	Manganese 0.000006	Nickel 0.000003	Selenium 0.00002	Total HAPs
Potential Emission in tons/yr	0.0009	0.0018	0.0009	0.005	0.015
Limited Emission in tons/yr	0.00030	0.00059	0.00030	0.00148	0.005

#### Methodology

No data was available in AP-42 for organic HAPs.

Potential Emissions (tons/year) = Throughput (mmBtu/hr)\*Emission Factor (lb/mmBtu)\*8,760 hrs/yr / 2,000 lb/ton Limited Emissions (tons/year) = (1407 kgal/yr/4380 kgal/yr)\*Throughput (mmBtu/hr)\*Emission Factor (lb/mmBtu)\*8,760 hrs/yr / 2,000 lb/ton